

**Division 3. Air Resources Board**

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**Chapter 9. Off-Road Vehicles and Engines Pollution Control Devices**

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**Article 1. Small Off-Road Engines**

**§ 2404. Emission Control Labels and Consumer Information -- 1995 and Later Small Off-Road Engines.**

(a) Purpose. The Air Resources Board recognizes that certain emissions-critical or emissions-related parts must be properly identified and maintained in order for engines to meet the applicable emission standards. In addition, the Board recognizes that information regarding engines' emissions levels may influence consumer choice. These specifications require engine or equipment manufacturers to affix a label (or labels) on each production engine (or equipment, as applicable) to provide the engine or equipment owner and service mechanic with information necessary for the proper maintenance of these parts in customer use. These specifications further require engine or equipment manufacturers to make information regarding relative emissions levels available to potential ultimate purchasers.

(b) Applicability. These specifications apply to

(1) 1995 and later small off-road engines, that have been certified to the applicable emission standards pursuant to Health and Safety Code Section 43013.

(2) Engine manufacturers and original equipment manufacturers, as applicable, that have certified such engines; and

(3) Original equipment manufacturers, regardless of whether they have certified the engine, if their equipment obscures the emissions control label of such certified engines.

(c) Engine Label Content and Location.

(1) A plastic or metal tune-up label must be welded, riveted or otherwise permanently attached by the engine manufacturer to an area on the engine (i.e., block or crankcase) in such a way that it will be readily visible to the average person after installation of the engine in the equipment. If such an attachment is not feasible, the Executive Officer may allow the label to be attached on components of the engine or equipment assembly (as applicable) that satisfy the requirements of Subsection (c)(2). Such labels must be attached on all engine assemblies (incomplete and complete) that are produced by an engine manufacturer.

(2) In selecting an acceptable location, the engine manufacturer must consider the possibility of accidental damage (e.g., possibility of tools or sharp instruments coming in contact with the label). Each engine label(s) must be affixed in such a manner that it cannot be removed without destroying or defacing the label, and must not be affixed to any engine (or equipment, as applicable) part that is likely to be replaced during the engine's (or equipment's, as applicable) useful life. The engine label must not be affixed to any engine (or equipment, as applicable) component that is easily detached from the engine. If the manufacturer claims there is inadequate space to affix the label, the Executive Officer will determine a suitable location.

(3) The engine label information must be written in the English language and use block letters and numerals (i.e., sans serif, upper-case characters) that must be of a color that contrasts with the background of the label.

(4) The engine label must contain the following information:

(A) The label heading must read: "IMPORTANT ENGINE INFORMATION."

(B) The full corporate name or trademark of the engine manufacturer.

(i) An engine manufacturer may request the Executive Officer's approval to delete its name and trademark, and substitute the name and trademark of another engine manufacturer, original equipment manufacturer, or third-party distributor.

(ii) Such an approval does not relieve the engine manufacturer granted an engine family Executive Order of any requirements imposed on the applicable engines by this Article.

(C) For alternate-fuel or dual-fuel engines, "THIS ENGINE IS CERTIFIED TO OPERATE ON (specify operating fuel(s))."

(D) Identification of the Exhaust Emission Control System. The method utilized to identify the exhaust emission control systems must conform to the emission-related nomenclature and abbreviations method provided in the Society of Automotive Engineers' procedure J1930, "Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations and Acronyms", September 1991; and as specified in Section 1977, Title 13, California Code of Regulations.

(E) For otto-cycle engines, the maintenance specifications and adjustments recommended by the engine manufacturer, including, as applicable: valve lash, ignition timing, idle air/fuel mixture setting procedure and value (e.g., idle CO, idle speed drop), and high idle speed. For diesel-cycle engines, the specifications and adjustments

**Division 3. Air Resources Board**

---

**Chapter 9. Off-Road Vehicles and Engines Pollution Control Devices**

---

**Article 1. Small Off-Road Engines**

recommended by the engine manufacturer, including, as applicable: initial injection timing, and fuel rate (in mm<sup>3</sup>/stroke) at rated power. These specifications must indicate the proper transmission position, (if applicable), during tune-up and what accessories, if any, should be in operation, and what systems, if any (e.g., vacuum advance, air pump), should be disconnected during the tune-up. If the engine manufacturer does not recommend adjustment of the foregoing specifications, the engine manufacturer may include in lieu of the "specifications" the single statement "NO OTHER ADJUSTMENTS NEEDED." For all engines, the instructions for tune-up adjustments must be sufficiently clear on the engine label to preclude the need for a mechanic or equipment owner to refer to another document in order to correctly perform the adjustments.

(F) Any specific fuel or engine lubricant requirements (e.g., lead content, research octane number, engine lubricant type).

(G) The date of engine manufacture (month and year).

(H) An unconditional statement of compliance with the appropriate calendar year (for 1995-1999) or model year (for 2000 and later) California regulations; for example, "THIS ENGINE MEETS 2005 CALIFORNIA EMISSION REGULATIONS FOR SMALL OFF-ROAD ENGINES." For engines certified to emission standards subject to a durability period as set forth in §2403(b), the durability period must be stated in the owner's manual.

(I) Engine displacement (in cubic centimeters) of the engine upon which the engine label is attached.

(J) The engine family identification (i.e., engine family name).

(5) If there is insufficient space on the engine to accommodate an engine label that contains all of the information required in Subsection (4) above, the Executive Officer may allow the engine manufacturer to modify the engine label as follows:

(A) Exclude the information required in Subsections (4)(C), (D), (E), (F), and (I) from the engine label. The fuel or lubricant information must be specified elsewhere on the engine, or in the owner's manual.

(B) Substitute the information required in Subsection (4)(E) with the statement: "REFER TO OWNER'S MANUAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS." When such a statement is used, the information required by Subsection (4)(E) must appear in the owner's manual.

(C) Exclude the information required by Subsection (4)(G) on the engine label if the date the engine was manufactured is stamped permanently on the engine, and this stamped date is readily visible.

(D) Make such other reasonable modifications or abbreviations as may be approved by the Executive Officer.

(d) An engine label may state that the engine conforms to any applicable federal emission standards for new equipment engines; or any other information that the engine manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the engine.

(e) Supplemental Engine Label Content and Location.

(1) When a final equipment assembly that is marketed to any ultimate purchaser is manufactured and the engine label attached by the engine manufacturer is obscured (i.e., not readily visible), the manufacturer of the final equipment assembly (i.e., original equipment manufacturer) must attach a supplemental engine label upon the engine or equipment. The supplemental engine label must be plastic or metal, must meet the visibility, durability and formatting requirements of paragraphs (f), (g) and (h), and must be welded, riveted or otherwise attached permanently to an area of the engine or equipment assembly so as to be readily visible to the average person.

(2) The original equipment manufacturer required to attach a supplemental engine label must consider the possibility of accidental damage to the supplemental engine label in the determination of the label location. Such a label must not be attached to any engine or equipment component that is likely to be replaced during the useful life of the engine or equipment (as applicable). Such a label must not be attached to any engine or equipment component that is detached easily from the engine or equipment (as applicable).

(3) The supplemental engine label information must be written in the English language and use block letters and numerals (i.e., sans serif, upper-case characters) that must be of a color that contrasts with the background of the label.

(4) A supplemental engine label must contain the information as specified in Subsection (c)(4) (and (l), as applicable), except that the date of engine manufacture specified in (c)(4)(G) may be deleted from the supplemental engine label. When the date of engine manufacture does not appear on the supplemental engine label, the responsible original equipment manufacturer must display (e.g., label, stamp, etc.) the date elsewhere on the engine or equipment so as to be readily visible.

**Division 3. Air Resources Board**

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**Chapter 9. Off-Road Vehicles and Engines Pollution Control Devices**

---

**Article 1. Small Off-Road Engines**

(f) As used in these specifications, readily visible to the average person means that a label is readable from a distance of 46 centimeters (18 inches) without any obstructions from equipment or engine parts (including all engine manufacturer or original equipment manufacturer (as applicable) available optional equipment) except for flexible parts (e.g., vacuum hoses, ignition wires) that can be moved out of the way without disconnection. Alternatively, information required by these specifications to be printed on the engine and supplemental engine (as applicable) must be no smaller than 2 millimeters in height provided that no equipment or engine parts (including all manufacturer available optional equipment), except for flexible parts, obstruct the label(s).

(g) The labels and any adhesives used must be designed to withstand, for the engine's or equipment's useful life, typical equipment environmental conditions in the area where the labels required by this section are attached. Typical equipment environmental conditions include, but are not limited to, exposure to engine fuels, lubricants and coolants (e.g., gasoline, motor oil, water, ethylene glycol). The engine manufacturer must submit, with its certification application, a statement attesting that its labels comply with these requirements.

(h) The engine manufacturer must obtain approval from the Executive Officer for all label formats and locations in conjunction with the engine family certification. Approval of the specific maintenance settings is not required; however, the format for all such settings and tolerances, if any, is subject to review. If the Executive Officer finds that the information on the label is vague or subject to misinterpretation, or that the location does not comply with these specifications, the Executive Officer may require that the label or its location be modified accordingly.

(i) Samples of all actual production labels used within an engine family must be submitted to the Executive Officer within thirty days after the start of production. Engine manufacturers must provide samples of their own applicable production labels, and samples of applicable production original equipment manufacturer labels that are accessible to the engine manufacturers due to the direct market arrangement between such manufacturers.

(j) The Executive Officer may approve alternate label locations or may, upon request, waive or modify the label content requirements provided that the intent of these specifications is met.

(k)(1) If the Executive Officer finds any engine manufacturer using labels that are different from those approved or that do not substantially comply with the readability or durability requirements set forth in these specifications, the engine manufacturer will be subject to revocation or suspension of Executive Orders for the applicable engine families, or enjoined from any further sales or distribution, of such noncompliant engine families, or subgroups within the engine families, in the State of California pursuant to Section 43017 of the Health and Safety Code. Before seeking to enjoin an engine manufacturer, the Executive Officer will consider any information provided by the engine manufacturer.

(2) If the Executive Officer finds any original equipment manufacturer using labels for which it has responsibility for attaching that are different from those approved or that do not substantially comply with the readability or durability requirements set forth in these specifications, the equipment manufacturer will be subject to being enjoined from any further sales, or distribution, of the applicable equipment product line that uses such noncompliant labels in the State of California pursuant to Section 43017 of the Health and Safety Code. Before seeking to enjoin an equipment manufacturer, the Executive Officer will consider any information provided by the equipment manufacturer.

(l) Air Index Label Content and Location. For engines certified to emission standards subject to a durability period as set forth in §2403(b) and for engines used to meet the requirements of §2403(c), each engine manufacturer must make Air Index and durability period information available to potential ultimate purchasers.

(1) The Air Index for each engine family is determined by the following formula:

$$\text{Air Index} = \frac{\text{FEL} * 3}{\text{Standard}}$$

rounded to the nearest whole number in accordance with ASTM E 29-93a (May 1993),

where

FEL= the Family Emission Limit (or standard, if averaging is not being used) for the engine; and

Standard = The HC+NOx emissions standard, as applicable in § 2403 (b).

(2) The emissions durability period must be indicated by the actual hours, by the descriptive terms shown in the table below, or by both.

(B) The Air Index Label must be noticeable from a distance of 150 centimeters (59 inches) without any obstructions by equipment or engine parts, including all engine manufacturer or original equipment manufacturer (as applicable) available optional equipment. For engines that are installed in an engine compartment that is easily

## **Board Administration and Regulatory Coordination Unit**

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### **Division 3. Air Resources Board**

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#### **Chapter 9. Off-Road Vehicles and Engines Pollution Control Devices**

---

##### **Article 1. Small Off-Road Engines**

accessible to the ultimate purchaser, this subsection (l)(5)(B) may be satisfied by a generic label or hang tag stating "LOOK INSIDE THE ENGINE COMPARTMENT FOR IMPORTANT EMISSIONS INFORMATION," or by other means, subject to the Executive Officer's approval.

(C) The Air Index Label must be located in at least one of the following locations:

(i) included on the engine label;

(ii) included as an additional engine label, designed and intended for removal only by the ultimate purchaser; or

(iii) included as an engine or equipment hang-tag designed or intended for removal only by the ultimate purchaser;

(D) For engines 0-65 cc, inclusive, the engine manufacturer must also arrange for a label with the engine family's Air Index to be attached to the equipment packaging.

(E) The Executive Officer, upon request, may waive or modify the form of the Air Index Label or may approve alternative forms, sizes or locations, provided that the intent of the Air Index Label requirement is met.

(6) The labeling and consumer information provisions of subsection (l) shall not apply to engines that are not the primary power source of the equipment in which they are installed or to engines that are installed in equipment that the engine or equipment manufacturer can demonstrate, to the Executive Officer's reasonable satisfaction, are used almost exclusively in commercial applications in which consumer information are not likely to affect a purchasing decision.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43017, 43018, 43101, 43102 and 43104, Health and Safety Code. Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

##### **REFERENCE**